

molybdenum, gallium, platinum, copper, chromium, rhodium, rhenium, tungsten, cobalt, germanium, zirconium, titanium, ruthenium, and combinations thereof. Such a list engulfs well over hundreds of combinations from which one reading this disclosure must choose. Accordingly, this disclosure merely reduces one reading its disclosure to “picking and choosing” from the long, non-specific “laundry list”. Accordingly, Wu et al. fail to disclose the claimed composition.

Further, Wu et al. fail to provide any indication and/or guidance with sufficient specificity that cobalt is preferred from this long, non-specific list. In fact, Wu et al. specifically disclose that molybdenum is preferred and only provide examples of compositions containing molybdenum. Still further, the compositions specifically disclosed by Wu et al. contain molybdenum at concentrations clearly lower than the claimed range of 4-40% by weight (see Claim 49 of the present specification).

In direct contrast, the claimed invention is a specific composition containing a beta zeolite, cobalt, a metal of group VIB and optionally one or more oxides as a carrier (See Claim 41, lines 1-2). Cobalt is unexpectedly able to impart upon the claimed composition the ability to be active in a one-step process for upgrading hydrocarbon mixtures boiling in the range of naphtha (35-250°C) containing sulfur impurities, namely hydrodesulfurization with contemporary isomerization of the skeleton of olefins contained in the hydrocarbons. As a result, the composition decreases the sulfur content in the hydrocarbon mixtures boiling in the naphtha range and, at the same time, a minimum octane is lost (e.g. RON and MON) which does not cause the complete saturation of the olefin double bond due to the isomerization of the olefin skeleton.

The above capabilities conferred to the cobalt-containing compositions could not have possibly been envisioned by Wu et al. because Wu et al. disclose a process of converting C₉₊

aromatic hydrocarbons to hydrocarbon mixtures rich in aromatic hydrocarbons from C₆ to C₈ carbon atoms. Further, as discussed above, Wu et al. fails to disclose with sufficient specificity, a catalyst containing cobalt because Wu et al. is completely devoid of such an example. Accordingly, withdrawal of this ground of rejection is respectfully requested.

The rejections of Claims 41-54 under 35 U.S.C. §102(b) over Kasztelan et al. is traversed below.

Kasztelan et al. discloses, at best, a catalyst and a process of hydrocracking. The catalyst according to Kasztelan et al. must contain a promoter deposited on a matrix selected from B, Si, and P.

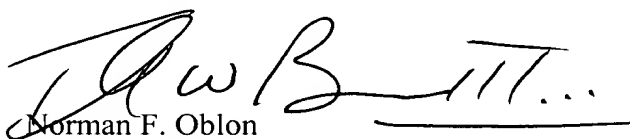
In direct contrast, the claimed invention does not require B, Si, and P as a matrix. Accordingly, Kasztelan et al. fails to disclose or suggest the claimed invention.

Further, Kasztelan et al. was not public at the filing date of the present application, nor was it filed in the United States as shown on the enclosed WPAT and Inpadoc data sheets. The present application claims priority acknowledged by the Office to Italian Application Number MI99A 000504 filed March 12, 1999. Kasztelan et al., however, was filed April 21, 1999. Therefore, Kasztelan et al. was filed after the priority document of the present application, and is not available as prior art in the present case. Accordingly, withdrawal of this ground of rejection is respectfully requested.

Applicants respectfully submit that the present application is now in condition for allowance. Early notice to this effect is respectfully requested. Should anything further be required to place this application in condition for allowance, the Examiner is requested to contact the undersigned by telephone.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Norman F. Oblon
Attorney of Record
Registration No. 24,618

Thomas W. Barnes III, Ph.D.
Registration No. 52,595



22850

(703) 413-3000
Fax #: (703) 413-2220
NFO/RLT/TWB:twb
I:\atty\Twb\22640315-AM-d.wpd